

CHAPTER IV.—YIELD AND WORKING.

SECTION 1. DEPARTMENTAL OPERATIONS.

34. The following statement gives the details of the working of the Wood Depots :—

Name of Depot.	Stock on hand on 1st April 1886.			Added during the year 1886-87.			Disposed of during the year 1886-87.			Balance on 31st March 1887.		
	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.
	C. ft.	No.	Mds.	C. ft.	No.	Mds.	C. ft.	No.	Mds.	C. ft.	No.	Mds.
Shikarpur ... ..	...	320	40	25	18,755	...	25	19,075	40	...	...	...
Sukkur	1,584	1,516	165	7,995	39,119	8,507	5,592	24,021	6,112	3,987	16,614	2,393
Rohri	13	1,345	...	1,758	13,965	...	1,050	9,172	...	721	6,138	...
Larkana	642	1,104	...	...	1,000	10,000	204	1,103	2,808	438	1,001	7,197
Sehwan ... ..	...	7,989	...	53	1,716	...	53	9,594	...	...	111	...
Karachi	2,115	...	1,405	...	73	184	372	73	1,589	1,743	...	...
Tatta	361	2,142	...	...	...	...	24	420	...	337	1,722	...
Ketj Bander	39	...	6,654	8,238	...	1,242	8,202	...	7,708	15	...	188
Kotri	975	...	8,539	3,469	...	1,08,144	3,620	...	1,06,521	824	...	10,162
Hyderabad	12,944	2,334	947	934	1,77,705	71,106	13,187	1,09,919	53,561	691	70,120	18,492

35. A statement showing the quantity of timber and fuel disposed of at each Depot during the year under report and the previous year is given below :—

Name of Depot.	Timber, C. ft.		Posts and rafters.		Fuel, Maunds.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Shikarpur ... ..	...	25	1,990	19,075	1,110	40
Sukkur	4,447	5,592	15,479	24,021	1,195	6,112
Rohri	524	1,050	4,265	9,172	...	...
Larkana... ..	332	204	1,483	1,103	3,300	2,803
Sehwan... ..	210	53	6,226	9,594	...	...
Karachi... ..	243	372	501	73	7,756	1,589
Tatta	212	24	688	420	30	...
Keti Bander	5,220	8,262	...	...	3,365	7,708
Kotri	2,802	3,620	75	...	1,02,740	1,06,521
Hyderabad	9,102	13,187	1,60,127	1,09,919	61,820	53,561

36. No change has been made in the system of working the Depots. The Hyderabad Depot is on the share system, all the others are worked departmentally in the ordinary way.

37. The Karachi Depot was found to be financially so unsuccessful that it has been abolished and the Establishment utilized on the Protection staff, where it was urgently required on account of the large area of newly demarcated Reserves that have been added to the Circle.

38. There is an increase in the sales in all the Upper Sind Depots, due to the better demand for timber that exists now and to meet which adequate arrangements were made by the Divisional Forest Officers, Sukkur and Jacobabad. The strict supervision exercised by Mr. Showkiram, Divisional Forest Officer, Sukkur, on the import of foreign timber in Sukkur and the capture and prosecution of Udho and Lalu alluded to in para. 19 of this report have also added to the demand for timber at the Government Depots.

39. The town of Shikarpur is supplied with firewood brought in by camel, cart and donkey-men under the permit-pass system: there is, therefore, such little demand for firewood at the Depot that it does not pay to keep it on sale there.

40. In Central Sind the Sehwan Depot shows an increase owing to better demand, and the Larkana Depot shows a falling off for the want of it. Larkana is also supplied with firewood under the permit-pass system and the demand for that article at the Depot is precarious, being limited in a great measure to brick and lime-burning contractors who require a considerable quantity at a time.

41. In the Hyderabad and Kotri Depots there is an increase under sales of "timber" but a falling off in posts and rafters—fluctuations due to the local demand. There is a slight falling off in firewood due to the same cause, as the Depot is kept well stocked.

42. In Lower Sind the Karachi Depot was doing such little work that it has been abolished. The poor sales at the Tatta Depot are attributed by the Divisional Forest Officer to the sale of large quantities of timber cut on canal banks; this is quite possible. Splendid Babul trees grow on both banks of the numerous canals that run through the district, numbers fall yearly or have to be removed when they endanger canal banks or embankments, and the usual practice of the Irrigation Department is to give the trees gratis to whomsoever will bear the expense of cutting and removing them; no other course appears feasible owing to the low price of wood in the district.

43. The Keti Bander Depot is hardly a sale Depot now; it is maintained for checking the enormous quantities of wood landed at Keti Bander for transport to Karachi, Bombay, and Katiawar ports.

44. A statement of timber supplied to the State Railway and other Departments direct by Departmental agency, from the forests is given below.

Name of Department.	Babul Bolsters.	Babul Brake Block.	Babul Sleepers.	Babul Logs.
North-Western Railway	1,012	2,990	1,071	...
Karachi Harbour Works .....	...	...	1,300	...
Gun Carriage Factory, Bombay .....	...	...	...	445

45. The proposed experimental delivery of 5,000 cheap Babul sleepers to the North-Western Railway, alluded to in para. 38 of last year's report nearly ended in a fiasco.

The original agreement was that sleepers of three classes should be tried—1st class prime timber straight sawn true on all four sides—2nd class sound timber sawn on two sides, straight horizontally but not necessarily straight vertically, axe trimmed on two sides—3rd class half round; the stems of trees of proper girth sawn in two and outside slabs with beds made for chairs.

The 3rd class were to be in larger proportion than either of the other kind. The sleepers were cut in accordance with these stipulations and the Manager was asked to depute some one to take delivery of them; in the meanwhile the Manager had added the stipulation that *all* the sleepers must be free of bark and sapwood. Now the majority of the sleepers, the half-round ones, were the trunks of trees sawn in two, the bark of course could be stripped off but a tree that grows with heart-wood on its outer surface has yet to be evolved by nature, consequently the majority of the sleepers were at first rejected, but since then the Railway authorities have consented to take all that will give a thickness of $4\frac{1}{2}$ inches under the chairs where the bed for ties is cut out. In the meanwhile a large number of sleepers rejected by the Railway were taken by the Port Engineer, Karachi. It would have been a great pity if the experiment with half-round sleepers had been allowed to fall through. Their great merits are extreme cheapness and abundant supply.

46. The quantity of timber cut departmentally and disposed of in the forests is given below. Operations under this head are unimportant.

Division.	Timber. C. ft.	Bhan Posts. No.	Bhan, rafters. No.	Jhau- rafters. No.	Kirrir rafters. No.	Babul rafters. No.	Babul Posts. No.
Sukkur	1,088	524	2,008	100	...	...	...
Jacobabad	14	...	...	...	...	...	...
Naushahro	1,520	100	2,250	9,375	800	...	37
Hyderabad	2,587	200	1,640	...	...	...	...
Jerruck	1,092	...	...	1,400	...	...	...
Total	6,301	824	5,898	10,875	800	...	37

47. The following statement shows the quantity of firewood supplied to the State Railway, other Departments, and public bodies during the year under report and the previous year:—

To whom supplied.	Firewood in Maunds.	
	1885-86.	1886-87.
North-Western Railway	12,83,220	19,40,425
Sind Railway	20,000	...
Commissioner's Steamer	9,138	13,281
Indus Ferry Steamers	2,10,195	2,11,738
River Conservancy Department	5,818	6,583
Public Works Department	169	125
Karachi Harbour Works	43,684	54,221
Commissariat Department	25,193	28,077
Hyderabad Water Works	30,175	42,500
Sukkur Municipality	4,000	1,800
Hyderabad Jail	2,765	2,578
Government Farm, Hyderabad	6,100	6,500
Total	16,40,457	23,07,828

The quantities are according to indent, and the arrangements made for delivering worked smoothly.

48. The quantity of firewood exported to Bombay and Katiawar ports is smaller than it was last year, but this is due to the fact that the man who

took the contract for exporting wood, also has the contract for supplying the Harbour Works in Karachi and the Commissariat Department, and as there was a difficulty in getting boats, &c., he could not get enough for both Karachi and Bombay, he devoted his attention chiefly to the former. His Bombay contract is from November 1886 to October 1887, and he hopes to export the full quantity of 3,00,000 cubic feet before the expiry of his contract. He will probably fulfil his contract as he is liable for the royalty on all the wood short of 3,00,000 cubic feet he fails to export, and the Contractor who preceded him forfeited Rs. 506 for failing to remove the full quantity he had undertaken to export.

49. A comparative statement for two years of the total quantity of firewood and charcoal cut or manufactured is given below :—

Name of Division.	Firewood in Maunds.		Charcoal in Maunds.	
	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	1,075	3,941	...	...
Jacobabad.....	6,300	18,747	...	...
Naushahro	18,331	8,525	1,939	3,675
Hyderabad.....	7,263	11,207	710	815
Jerruck.....	1,14,268	1,62,280	14,916	24,838
Total.....	1,47,237	2,04,700	17,565	29,328

The increase in charcoal is due to the export of that article to Aden and the Persian Gulf.

SECTION 2. REMOVAL OF PRODUCE BY PURCHASERS.

50. Under this head timber operations are not very extensive for reasons already explained in former reports.

51. The value of timber removed by purchasers is given below for two years :—

Name of Division.	Timber.	
	Value.	
	1885-86.	1886-87.
	Rs.	Rs.
Sukkur	2,053	2,518
Jacobabad	2,710	1,723
Naushahro	170	405
Hyderabad	439	526
Jerruck	345	590
Total.....	5,717	5,762

52. The following table gives value of firewood removed by purchasers other than those who remove it under the Ghat or permit-pass system which is given separately :—

Name of Division.	Firewood.	
	Value.	
	1885-86.	1886-87.
	Rs.	Rs.
Sukkur	767	674
Jacobabad	910	92
Naushahro	157	70
Hyderabad	1,865	1,525
Jerruck	1,294	344
Total.....	4,993	2,705

The above is wood removed from the forests for lime and brick-burning.

53. The receipts at the different Ghats or Nakas under the permit-pass system for two years is given below :—

Division.	Name of Ghat.	Revenue realized.	
		1885-86.	1886-87.
		Rs.	Rs.
Sukkur	Rahuja	10,329	10,275
	Jhali		
	Rohri		
Jacobabad	Sadar	12,907	14,786
	Stewart		
	Khura		
Naushahro	Larkana	2,765	2,748
Hyderabad	New Fuleli	709	842
	Old Fuleli		
	Hajipur		
Total.....		26,710	28,651

The increase is due to greater demand.

SECTION 3. FREE GRANTS.

54. Free grants of timber to the value of Rs. 1,006 were made to poor agriculturists, and timber and firewood to the value of Rs. 384-0-0 was removed gratis by Public Works Department Contractors under the authority of Government Resolution No. 2432 of 7th May 1879.

SECTION 4. SUMMARY OF PRODUCE.

55. The following is a comparative statement for two years of the timber cut and removed from the forests by Departmental Agency including that brought to Depôts :—

Division.	Timber of all kinds in cubic feet.		Posts. No.		Rafters. No.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	5,193	7,661	1,082	6,124	8,774	29,298
Jacobabad.....	248	39	386	6,795	3,229	12,280
Naushahro.....	2,150	1,777	4,172	1,750	65,536	21,509
Hyderabad.....	19,803	19,229	4,907	5,919	1,05,042	1,05,991
Jerruck.....	9,150	9,750	2,066	420	1,417	1,473
Total....	36,544	38,458	12,613	21,008	1,83,998	1,70,551

56. The quantity of timber cut and removed by purchasers is given below :—

Division.	Timber of all kinds in cubic feet.		Posts. No.		Rafters.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	2,483	1,988	147	753	47,260	53,522
Jacobabad	2,359	1,571	3,670	2,306	68,872	48,712
Naushahro	384	2,465	8	...	3,392	5,842
Hyderabad	340	927	1,235	600	2,375	7,791
Jerruck.....	386	1,536	315	274	223	7,220
Total.....	5,952	8,487	5,375	3,933	1,22,128	1,23,087

57. The total yield in timber of each Division is as under for two years :—

Division.	Timber of all kinds in cubic feet.		Posts. No.		Rafters. No.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	7,676	9,649	1,229	6,877	56,040	82,820
Jacobabad	2,607	1,610	4,056	9,101	72,101	60,992
Naushahro	2,534	4,242	4,180	1,750	68,928	27,351
Hyderabad	20,143	20,156	6,142	6,519	1,07,417	1,13,782
Jerruck.....	9,536	11,286	2,381	694	1,640	8,693
Total.....	42,496	46,943	17,988	24,941	3,06,126	2,93,638

58. The total yield in firewood of each Division is given below :—

Division.	Sold at Depots.		Sold on edge of Forests.		Supplied to Departments.		Removed by Purchasers.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	1,195	6,112	1,075	3,941	7,22,682	8,94,598	1,68,317	1,65,205
Jacobabad	1,110	40	6,300	10,447	1,58,463	4,27,071	1,80,675	2,16,463
Naushahro	3,300	2,803	18,331	8,525	3,04,185	4,31,147	54,375	45,190
Hyderabad	1,64,560	1,60,082	7,263	11,207	3,35,966	3,84,724	37,084	35,242
Jerruck.....	11,151	9,297	1,14,268	1,62,280	1,19,161	1,70,288	23,050	5,114
Total.....	1,81,316	1,78,334	1,47,237	2,05,400	16,40,457	23,07,828	4,63,510	4,67,214

59. The total yield of charcoal of each Division is as under :—

Division.	Charcoal in Maunds.	
	1885-86.	1886-87.
Sukkur .....	.....	33
Jacobabad	1,653	2,736
Naushahro.....	1,939	3,675
Hyderabad.....	4,866	2,691
Jerruck	17,117	26,608
Total.....	25,575	35,746

60. The following is the total yield of the whole Circle during the year under report and the previous year :—

Timber.....	{ 1885-86 1886-87	C. ft.	37,368 46,943
Sleepers	{ 1885-86 1886-87	No.	1,389 2,388
Posts	{ 1885-86 1886-87	No.	17,988 24,941
Rafters	{ 1885-86 1886-87	No.	3,06,126 2,93,638
Firewood.....	{ 1885-86 1886-87	Mds.	23,50,846 31,58,776
Charcoal	{ 1885-86 1886-87	Mds.	25,575 35,746

61. The realizations by the sale of farms for removal of Minor produce and the right of fishing in Forest waters are given below for each Division during the last two years :—

Division.	Babul pods.		Lac.		Munj reed and Sar grass.		Fishery.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
Sukkur.....	145	247	...	...	345	449	690	821
Jacobabad .....	...	...	...	...	71	134	105	444
Naushahro	1,229	2,037	...	...	244	312	96	390
Hyderabad	4,806	6,944	935	672	...	...	436	493
Jerruck	2,422	2,803	...	...	...	100	220	244
Total.....	8,662	11,031	935	672	660	993	1,547	2,392

62. The area under cereal cultivation in each Division and the amount realized by assessment is as under. The Rabi cultivation is nearly all fodder crops on fresh alluvial accretions to the forests raised by cattle-breeders and others living in or on the edge of the forests.

Division..	Area under cultivation.				Amount realized by assessment.			
	Kharif.		Rabi.		Kharif.		Rabi.	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
Sukkur.....	529	525	2,150	1,859	1,223	1,275	6,121	6,356
Jacobabad .....	...	...	19	16	...	...	90	78
Naushahro	230	444	1,682	2,145	568	1,353	6,755	6,351
Hyderabad	336	287	583	1,074	867	720	1,507	3,175
Jerruck.....	306	1,127	158	350	787	3,055	317	682
Total.....	1,401	2,393	4,592	5,444	3,465	6,403	14,790	16,642

63. A comparative statement for two years of the realizations from grazing fees is given below for each Division :—

Division.	Grazing fees.	
	1885-86.	1886-87.
	Rs.	Rs.
Sukkur	12,510	11,741
Jacobabad	1,404	2,206
Naushahro.....	6,957	7,705
Hyderabad	13,839	13,611
Jerruck	10,954	10,604
Total.....	45,664	45,867

SECTION 5. EXPORT OF FOREST PRODUCE.

64. The Gun Carriage Factory in Bombay was supplied with 8,238 cubic feet of Babul timber. The export of firewood to Bombay and Katiawar ports was 43,746 Bengal maunds. The larger quantity of charcoal sold from the forests would show that its export is on the increase, but the figures showing the actual quantity of forest made charcoal exported cannot be given as delivery of the charcoal by the purchaser is taken in the forest and the general export includes charcoal made outside forest limits by private holders of forest land and by those who make charcoal of trees removed from canal banks.

65 Another attempt is being made to get Babul bark into the English Market.

CHAPTER V. FINANCIAL RESULTS.

66. A comparative statement of the total receipts and expenditure during the last two years is given below :—

	Actuals for 1885-86.	Actuals for 1886-87.	Increase.	Decrease.
	Rs.	Rs.	Rs.	
Receipts.....	5,36,874	6,85,782	1,48,908	...
Expenditure—				
A. Conservancy and works	2,96,893	4,04,090	1,07,197	...
B. Establishment	1,05,767	1,13,613	7,846	...
Total Expenditure.....	4,02,660	5,17,703	1,15,043	...
Net Revenue...	1,34,214	1,68,079	33,865	...

The revenue both gross and net is the largest ever made in the Sind Circle, but the expenditure as compared to receipts is far larger than in other Circles, but the reason for this is very easy to show. The chief product of the other two Circles is timber, an article valuable in itself, and it is either sold standing to the purchaser or is cut departmentally and sold on the edge of the forest so that the expenses of working the forests are reduced to a minimum. The chief product of the Sind forests is firewood for which there is practically no demand in the Forests; before it can be disposed of it has to be cut, carted or carried on pack-animals and boated from distances ranging from seven to over a hundred miles—forty being a very common distance for wood to be carried before it can be delivered at the place of consumption. Firewood moreover is cheaper in Sind than it is in any other district I know of in India—so that it is only by studying the convenience of large consumers and by strict economy in working charges and by most careful arrangements in placing the wood in suitable localities on the bank of the river, side-channels and canals, for boating during the different stages in the rise and fall of the river that it is possible to show a profit over working expenses. The Railway authorities only consent to burn it so long as they can get it at about half the price of its equivalent in coal and the Port Engineer has been careful to inform me that there is very little profit in the use of wood fuel over coal and rejected a very large quantity of wood as not *dry enough* that had been cut six months.